

WHAT IS CLAIMED IS:

1 1. A virtual reality presentation method comprising:
2 capturing motion of a user;
3 capturing audio of the user;
4 transforming the audio of the user into a different
5 entity; and
6 animating a character with the motion and
7 transformed audio in real-time.

1 2. The method of claim 1 further comprising displaying
2 the animated character on an output device.

1 3. The method of claim 1 in which capturing motion
2 comprises:
3 attaching multiple motion tracking sensors to areas
4 of the user to track the user's movements; and
5 transmitting signals representing the movements from
6 the sensors to a computer system.

1 4. The method of claim 1 in which capturing audio
2 comprises attaching a microphone to the user.

1 5. The method of claim 4 in which the microphone is a
2 wireless microphone.

1 6. The method of claim 1 in which transforming the
2 audio comprises:
3 altering pitch characteristics of the audio of the user.

1 7. The method of claim 1 in which animating comprises:
2 applying the motion to a three dimensional (3-D)
3 model; and
4 combining the transformed audio to the 3-D model.

1 8. The method of claim 1 in which transforming the
2 audio comprises:
3 transforming the audio into the different entity
4 that is of the opposite gender.

1 9. A presentation method comprising:
2 generating a three-dimensional (3-D) model of a
3 character;
4 capturing motion of a user in real-time;
5 capturing audio of the user in real-time;
6 modifying a gender of the audio of the user; and
7 animating the 3-D model with the motion and modified
8 audio of the user in real-time.

1 10. The method of claim 9 further comprising displaying
2 the animated 3-D model on an output device.

1 11. The method of claim 9 in which capturing motion
2 comprises:
3 attaching multiple motion tracking sensors to areas
4 of the user to track the user's movements; and
5 transmitting magnetic fields representing the
6 movements from the sensors to a computer system.

1 12. The method of claim 9 in which capturing audio
2 comprises attaching a microphone to the user.

1 13. The method of claim 12 in which the microphone is a
2 wireless microphone.

1 14. The method of claim 9 in which modifying comprises
2 altering pitch characteristics of the audio of the user.

1 15. A presentation system comprising:
2 a motion tracking device connected to a user;
3 an audio receiving device connected to the user;
4 an audio receiver/converter to transform the audio
5 into audio of a different gender to that of the user; and
6 a system to produce an animated three-dimensional
7 character from the motion and converted audio.

1 16. The system of claim 15 further comprising an output
2 device.

1 17. The system of claim 15 in which the motion tracking
2 device comprises:

3 a set of interconnected sensors affixed to the user;
4 and

5 a transmitting device for receiving signals from the
6 sensors and sending them to a computer system.

1 18. The system of claim 15 in which the audio receiving
2 device is a microphone.

1 19. The system of claim 18 in which the microphone is a
2 wireless microphone.

1 20. The system of claim 15 in which the audio
2 receiver/converter comprises an audio effects digital signal
3 processor.

1 21. A computer program product for producing a virtual
2 reality presentation, the product residing on a computer
3 readable medium having instructions stored thereon which, when
4 executed by the processor, cause the processor to:

5 capture motion of a user;

6 capture audio of the user;

7 transform the audio of the user into audio of an opposite
8 gender to that of the user; and

9 animate a character with the motion and transformed audio
10 in real-time to render a virtual reality presentation on an
11 output device.

1 22. A computer program product for producing a virtual
2 reality presentation, the product residing on a computer
3 readable medium having instructions stored thereon which, when
4 executed by the processor, cause the processor to:

5 generate a three-dimensional (3-D) model of a character;

6 capture motion of a user in real-time;

7 capture audio of the user in real-time;

8 modify a gender of the audio opposite to that of the
9 user; and

10 animate the 3-D model with the motion and modified audio
11 of the user in real-time to render a virtual reality
12 presentation on.

1 23. A presentation method comprising:

2 detecting motion of a user;

3 detecting audio of the user;

4 altering the audio of the user;

5 synchronizing the motion of the user to an animated
6 character; and

7 synchronizing the altered audio of the user to the
8 animated character.

1 24. The method of claim 23 in which detecting motion
2 comprises:

3 receiving signals representing motions from sensors
4 attached to the user; and
5 processing the signals in a computer system.

1 25. The method of claim 23 in which detecting audio
2 comprises:

3 receiving audio signals from a microphone attached to the
4 user.

1 26. The method of claim 23 in which altering the audio
2 comprises:

3 modifying a fundamental frequency of the audio.

1 27. The method of claim 23 further comprising:
2 displaying the animated character on an output device.

1 28. The method of claim 27 in which the output device is
2 a projector.

1 29. The method of claim 27 in which the output device is
2 a flat panel plasma monitor.

1 30. The method of claim 27 in which the output device is
2 a multi-scan presentation monitor.

1 31. The method of claim 27 in which the output device is
2 an electronic white board.

1 32. The method of claim 27 in which the output device is
2 a projection screen.